Section 1 Introduction

1.1 Stormwater Management: Why It's Important

State Water Resources Control Board (SWRCB) Water Quality Order No. 2003-0005-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000004, "Waste Discharge Requirements (WDRs) for Small Municipal Separate Storm Sewer Systems" (MS4 General Permit), reports the following findings:

- "Urban runoff is a leading cause of pollution throughout California."

- "Pollutants of concern found in urban runoff include sediments, non-sediment solids, nutrients, pathogens, oxygen-demanding substances, petroleum hydrocarbons, heavy metals, floatables, polycyclic aromatic hydrocarbons (PAHs), trash, and pesticides and herbicides."

- "During urban development, two important changes occur. First, where no urban development has previously occurred, natural vegetated pervious ground cover is converted to impervious surfaces such as paved highways, streets, rooftops, and parking lots. Natural vegetated soil can both absorb rainwater and remove pollutants providing a very effective purification process. Because pavement and concrete can neither absorb water nor remove pollutants, the natural purification characteristics of the land are lost. Second, urban development creates new pollutant sources as human population density increases and brings with it proportionately higher levels of vehicle emissions, vehicle maintenance wastes, municipal sewage, pesticides, household hazardous wastes, pet wastes, trash, etc., which can be washed into the MS4. As a result of these two changes, the runoff leaving a developed urban area may be significantly greater in volume, velocity, and/or pollutant load than pre-development runoff from the same area."

- "A higher percentage of impervious area correlates to a greater pollutant load, resulting in turbid water, nutrient enrichment, bacterial contamination, organic matter loads, toxic compounds, temperature increases, and increases of trash or debris."

- "Pollutants present in stormwater can have damaging effects on both human health and aquatic ecosystems. In addition, the increased flows and volumes of stormwater discharged from impervious surfaces resulting from development can significantly impact beneficial uses of aquatic ecosystems due to physical modifications of watercourses, such as bank erosion and widening of channels."

- "When water quality impacts are considered during the planning stages of a project, new development and many redevelopment projects can more efficiently incorporate measures to protect water quality."

1.2 Stormwater Management: A Water Quality Mandate for San Luis Obispo County

Most of the unincorporated communities within the County lack formal stormwater infrastructure. The County currently uses the natural hydrology of the watershed to convey stormwater runoff to receiving waters. In areas lacking natural pathways for stormwater runoff, the County uses retention/detention basins to slow runoff and allow for infiltration. Urbanized portions of the County have a larger proportion of impervious surfaces (i.e., roofs, driveways, parking lots, roads) to "natural" surfaces than more rural portions of the County. Impervious surfaces prevent infiltration of stormwater, thereby increasing the velocity and volume of stormwater entering a water body at any one point. Urbanized communities have a higher concentration of land uses that increase the presence of household chemicals, commercial products, and vehicles, resulting in an increase in the potential release of pollutants to receiving waters.

Until recently, stormwater runoff in areas with populations of less than 100,000 people was not regulated. Although many existing stormwater runoff controls have been in place, there has not been an integrated and comprehensive approach to preventing pollution from stormwater runoff in these less populated areas. The MS4 General Permit requires that the County of San Luis Obispo, as a Phase II regulated MS4, develop a Stormwater Management Program (SWMP) designed to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP) and to protect water quality.

1.3 The Purpose of the Stormwater Management Program (SWMP)

The purpose of the SWMP is to comply with the mandatory requirements of the U. S. Environmental Protection Agency (USEPA) National Pollutant Discharge Elimination System (NPDES) Phase II Final Rule and the State Water Resources Control Board (SWRCB) Water Quality Order No. 2003-00005-DWQ, NPDES General Permit No. CAS000004, "Waste Discharge Requirements for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) General Permit (referred to as the "MS4 General Permit"). The USEPA developed the NPDES Phase II Final Rule under the authority of the Clean Water Act to reduce impacts to water quality from stormwater pollution. The State of California adopted the MS4 General Permit on April 30, 2003 to implement the NPDES Phase II Final Rule in California.

The County prepared this SWMP to meet the Federal and State NPDES Phase II regulatory requirements and to align existing stormwater management activities in the County with current Best Management Practices (BMPs). Working cooperatively with other agencies and with public participation and involvement, the County will use this SWMP to achieve the intent of the regulation in the most cost effective and comprehensive manner. Preventing stormwater pollution of our water bodies is a duty shared by the Federal, State, County, and other local governments along with each and every resident of San Luis Obispo County.

1.4 Summary of Regulatory Requirements

Enacted in 1990, Phase I of the Stormwater Rule applied to municipal separate storm sewer systems (MS4s) with a service population of 100,000 or more, to construction projects affecting five acres or more of land disturbance, and to certain industrial activities. Phase II of the Stormwater Rule is generally applicable to MS4s serving an urban population of 10,000 or more and construction activities affecting one acre or more of land disturbance.

Under the NPDES Phase II Rule and the MS4 General Permit, Small MS4s that meet specific criteria must obtain MS4 General Permit coverage for stormwater discharges. MS4 General Permit coverage for the County will be issued by the Central Coast Regional Water Quality Control Board (RWRCB) and must be renewed every five years. The County was required to comply with Federal NPDES Phase II requirements on March 10, 2003, at which time, the County submitted a Notice of Intent (NOI) to comply with the State's MS4 General Permit to the RWQCB. To comply with the State's MS4 General Permit, the MS4 operator (in this case, the County) must implement a Stormwater Management Program (SWMP) that reduces the discharge of pollutants to the "maximum extent practicable", that protects water quality, and that satisfies the requirements of the Clean Water Act according to California's MS4 General Permit. The County and other regulated communities were required to submit a NOI, a permit fee, and their SWMP on or before the State's General Permit deadline.

The MS4 General Permit was adopted by the State on April 30, 2003. The RWQCB reviewed the County's SWMP and requested revisions to the County's SWMP on February 6, 2004. The RWQCB requested that the County update the SWMP to refer to the MS4 General Permit and the 2002 Clean Water Act Section 303(d) List of Impaired Water Bodies that were approved by the Federal and State governments after the original revision of the SWMP was submitted. The RWQCB also requested that the County add more detail to the SWMP and move the implementation timelines up wherever possible. The second revision of the SWMP reflects compliance with RWQCB requests and was approved by the Board of Supervisors on April 27, 2004 and submitted to the RWQCB on May 7, 2004.

On October 13, 2004, the RWQCB approved the second revision of the SWMP and posted it on the State Water Resources Control Board website for the required sixty-day public comment period. The RWQCB received extensive comments and a request for public hearing from a national environmental organization, the Natural Resources Defense Council (NRDC) and their consultant on December 12, 2004, the last day of the public comment period. No other comments were received.

On November 7, 2005, the County received a letter from the RWQCB requesting additional revisions to the SWMP to be re-submitted no later than January 3, 2006. To ensure adequate time to revise the SWMP, the County requested an extension of the

January 3 deadline to June 30, 2006. This request for extension was granted by the RWQCB.

The Department of Public Works revised the SWMP for this third revision to incorporate RWQCB's comments. The third revision of the SWMP was approved by the Board of Supervisors on June 13, 2006 and will be submitted to the RWQCB on or before June 30, 2006.

USEPA and the SWRCB have determined that a SWMP will be considered to reduce pollutants to the "maximum extent practicable" (MEP) if it fulfills the following minimum control measures (MCMs):

1) Public Education and Outreach;
2) Public Participation and Involvement;
3) Illicit Discharge Detection and Elimination;
4) Construction Site Runoff Control;
5) Post-Construction Stormwater Management; and
6) Pollution Prevention/Good Housekeeping for Municipal Operations

To fulfill each of the six minimum control measures and reduce pollutants to achieve the MEP, MS4s are required to develop and implement Best Management Practices (BMPs) and measurable goals. BMPs consist of structural and non-structural activities that address stormwater. The BMPs in this SWMP were selected using a process based on EPA guidance documents, the MS4 General Permit, and on factors specific to the County and the regulated communities. As such, these BMPs provide controls that meet federal and state requirements and are locally applicable.

1.5 Scope and Responsibility for the Stormwater Management Program

The SWRCB has determined that the following unincorporated communities located in San Luis Obispo County are subject to NPDES Phase II requirements and the MS4 General Permit:

1. Baywood-Los Osos;
2. San Luis Obispo (urban fringe);
3. Nipomo;
4. Atascadero/ Paso Robles (urban fringe including Templeton, Santa Margarita and Garden Farms);
5. Cambria; and
6. Oceano

These communities were selected based on criteria that take into account the potential to impact water quality due to conditions influencing discharges into their storm sewer systems or due to where they discharge. These criteria are listed below.

1) Areas Automatically Designated. In these areas, USEPA designated communities automatically due to their location within an urbanized area defined by the 2000 Census. The 2000 Census identified urbanized areas that have a population greater than 50,000 and have an overall population density greater than 1,000 people per square mile. The areas within the County's SWMP coverage area designated under this criterion include San Luis Obispo (urban fringe), the Atascadero/Paso Robles urban complex (urban fringe including Templeton, Garden Farms and Santa Margarita), and Nipomo, which is included in the Santa Maria urbanized area.

2) Areas Designated by the State: A community can be individually designated by the SWRCB and/or RWQCB based on:

- a "high population density" of at least 1,000 people per square mile (including tourists and commuters). Baywood-Los Osos, Cambria, and Oceano were added under this criterion.

- a "high growth" or "high growth potential" where an area grew by more than 25% between 1990 and 2000 or anticipates a growth rate of more than 25% over a 10 year period ending prior to the end of the first permit term. No communities under County jurisdiction were designated under this criterion.

- a significant contributor of pollutants to an interconnected permitted MS4. A small MS4 is interconnected with a separate permitted MS4 if stormwater that has entered the small MS4 is allowed to flow directly into a permitted MS4. No communities under County jurisdiction were designated under this criterion.

- discharges to sensitive water bodies. Sensitive water bodies are receiving waters including groundwater that are an environmental protection priority. Sensitive waters include 1) those listed as providing or known to provide habitat for threatened or endangered species; 2) those used for recreation that are subject to beach closures or health warnings; 3) those listed as impaired subject to the Clean Water Act (CWA) 303(d) list due to constituents of concern such as biological oxygen demand (BOD), sediment, pathogens, petroleum hydrocarbons, heavy metals, floatables, polycyclic aromatic hydrocarbons, trash, and other constituents found in the MS4 discharge. Baywood-Los Osos and Cambria are listed under this criterion because Baywood-Los Osos discharges to Morro Bay, which is on the CWA 303(d) list for sediment, pathogens, and metals and Cambria because it discharges to the Monterey Bay National Marine Sanctuary.

- a significant contributor of pollutants to waters of the United States. Specific conditions presented by the MS4 may lead to significant pollutant loading to waters of the U.S. that are otherwise unregulated or inadequately regulated. An example of such a condition would be the presence of a large transportation

industry. No communities under County jurisdiction were designated under this criterion.

1.6 The County's Approach

The County must address a relatively large and varied coverage area in this SWMP. Refer to Appendix A for management area assessments and maps for the SWMP coverage area. To most effectively address stormwater issues in the SWMP coverage area, the County has developed the following approach:

1) *Provide General Guidance and Anticipate Specific Needs of the Community*. The County has structured the SWMP to meet the requirements of the NPDES Final Rule and the MS4 General Permit. The County anticipates that application of the SWMP within each community will require further analysis of community-specific resources and issues. The SWMP has been designed to provide a menu of BMPs that can be tailored to the particular needs of a community.

2) Provide for Community Input. In the early stages of the SWMP, the County will provide opportunities for community input to the SWMP. The County anticipates presentations to the Water Resources Advisory Committee (WRAC) and other stakeholder groups. These stakeholder meetings and presentations will give the public opportunities to gain an understanding of the new regulation and its implications and to provide comment regarding the application of the SWMP in their local community.

3) Review and Revise Ordinances. Jurisdictions often find that their ordinances do not provide the language or authority necessary to implement and enforce Phase II requirements. The County anticipates a thorough review of applicable ordinances and formulation of the amendments to ordinances needed to implement the SWMP.

4) Process New and/or Revised Ordinances. The County anticipates processing of new and/or revised ordinances in Years 1 through 5 of SWMP implementation.

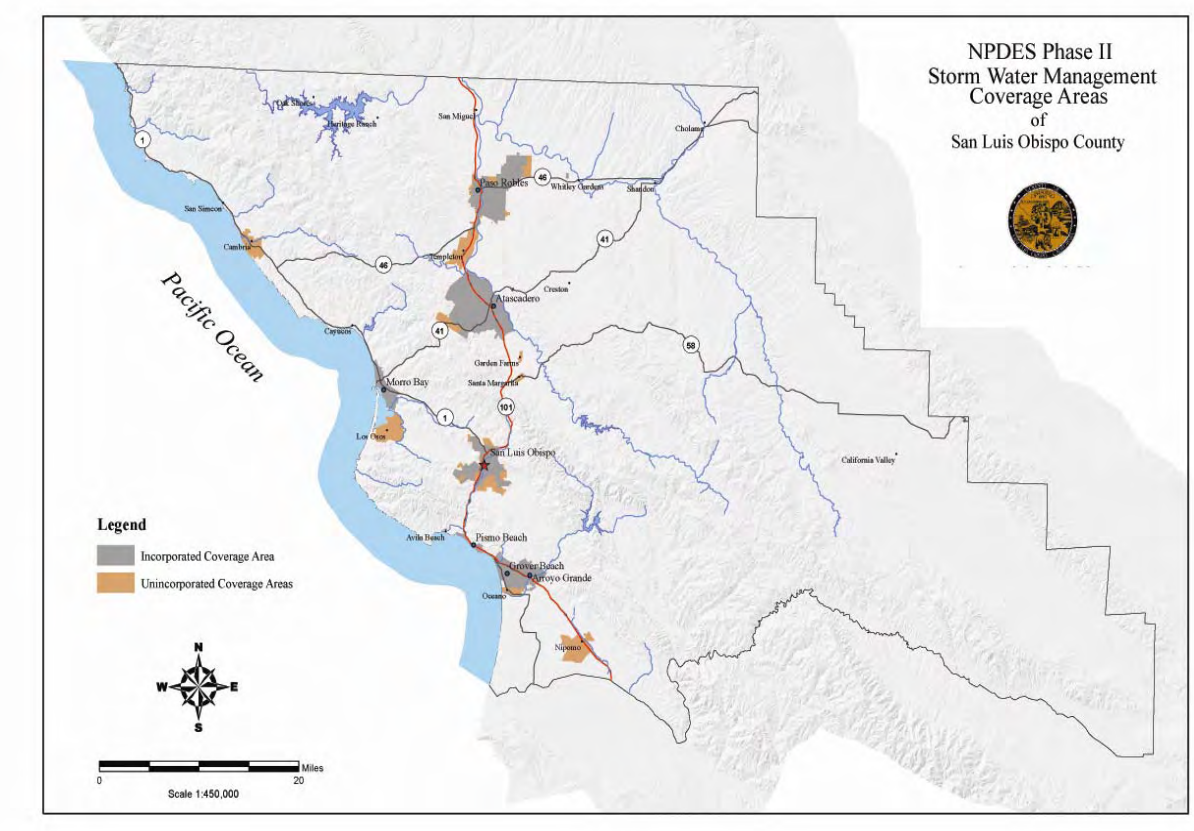
5) Begin implementation of BMPs. The schedule for implementation of BMPs over the first five-year permit term will vary depending on the BMP. More complex BMPs are broken down into a number of stages with measurable goals identified for each. The more complex BMPs will take longer than those that require relatively simple changes to existing practices. Refer to Section 4 for a description of the BMPs and Measurable Goals for each Minimum Control Measure and for the BMP implementation timetable and responsible parties.

6) Review and Report on Effectiveness. The County will determine whether the MEP is being achieved through annual review and reporting of stormwater management activities. On construction sites, the County will determine the MEP on a case-by-case basis. To determine the MEP for a specific site, the County will consider the proximity

of the site to local water bodies and the state of the water bodies, among other factors, for the proposed activity.

1.7 Special Considerations for San Luis Obispo County

San Luis Obispo County encompasses incorporated cities, unincorporated Community Services Districts (CSDs), and other unincorporated areas. The map below shows the unincorporated and incorporated areas designated for NPDES Phase II coverage. The scope and responsibility for this SWMP must take into account special considerations for the jurisdictions of the county, incorporated cities, and CSDs. Although this SWMP is not a "Regional SWMP", the County has met with the cities and CSDs and will continue to coordinate regional efforts for public education and outreach and public participation and involvement activities. The roles of the incorporated cities and CSDs are described below.



Incorporated Cities

San Luis Obispo County encompasses seven incorporated cities. The incorporated cities and other MS4s outside the County's jurisdiction must prepare and maintain their own SWMPs for the areas within their jurisdictions. The County's SWMP covers the unincorporated "urban fringe" areas adjacent to the City of San Luis Obispo, the City of Paso Robles, and the City of Atascadero. Managing stormwater considerations on a

regional scale increases the effectiveness of BMPs and reduces the burden on each individual permitted entity. During the course of this first five-year permit term, regional collaboration and planning are envisioned to evolve as this SWMP is implemented.

Currently several advisory bodies exist to address regional water quality concerns. The Water Resources Advisory Committee (WRAC) is an organization of stakeholders and governmental representatives that meets to discuss regional water planning issues. The San Luis Obispo (SLO) County Partners for Water Quality (SLOCPWQ) is a coalition of MS4s that meets to address issues associated with NPDES Phase II implementation. The County anticipates continued participation in the WRAC and SLOCPWQ as part of SWMP implementation.

Community Services Districts (CSDs)

A variety of public services in the communities of Los Osos, Nipomo, Cambria, Templeton, and Oceano are governed by citizen-elected CSDs. Services provided by some of the CSDs include maintenance of detention basins, water quality monitoring, and other stormwater-related activities. The CSDs consist of elected boards of directors that have primary jurisdiction over specific aspects of municipal operations. CSD decisions are final, that is, they cannot be appealed to the County Board of Supervisors; therefore, the County does not have a direct role in certain municipal operations for these communities. In all of the above cases, the County retains jurisdiction over roads and building projects. Specific stormwater management responsibilities for the County and each CSD are shown in Tables 1.1 and 1.2 below.

Table 1.1. Current CSD Stormwater-Related Activities

CSD	Description of CSD Stormwater-Related Activities
Los Osos/ Baywood Park (LOCSD)	LOCSD maintains a number of stormwater retention basins and is generally responsible for drainage and septic systems. LOCSD has submitted a SWMP for their municipal operations. LOCSD has completed a drainage plan for the community and is in the design phase of a community wastewater treatment plant that will replace septic tanks in portions of the community and will allow for more control over localized drainage problems.
Nipomo (NCSD)	NCSD's charter includes stormwater management; however, the County owns and operates the storm sewer system in Nipomo at this time. The County has prepared a drainage plan for the area and is coordinating efforts with NCSD. Nipomo falls entirely under the County SWMP.
Cambria (CCSD)	The County retains jurisdiction over drainage and flood control in the community of Cambria. Cambria falls entirely under the County SWMP.
Templeton (TCSD)	TCSD manages stormwater within a portion of the community and has been in discussions with the County about preparing a SWMP. Templeton's stormwater issues are confined to the north Main Street area where the CSD operates one drainage basin and collects drainage fees.
Oceano (OCSD)	OCSD maintains at least two stormwater basins in the community. The County retains jurisdiction over all other aspects of stormwater management in the community.

Table 1.2. County and CSD Stormwater Management Responsibilities

CSD	MCM1 Public Education & Outreach	MCM2 Public Participation & Involvement	MCM3 Illicit Discharge Detection & Elimination	MCM4 Construction Site Runoff Control	MCM5 Post-Construction Stormwater Management	MCM6 Pollution Prevention Good House-keeping for Municipal Operations
Los Osos/ Baywood Park	County & LOCSD	County & LOCSD	County except for water and waste-water services	County	County	County for roads and all other County owned facilities. LOCSD for LOCSD owned facilities.
Nipomo	County	County	County except for water and waste-water services	County	County	County except for NCSD owned facilities.
Cambria	County	County	County except for water and waste-water services	County	County	County except for CCSD owned facilities.
Templeton	County & TCSD	County & TCSD	County except for water and waste-water services	County	County	County for roads and all other County owned facilities. TOCSD for TOCSD owned facilities.
Oceano	County	County	County except for water and waste-water services	County	County	County for roads and all other County owned facilities. OCSD for OCSD owned facilities.